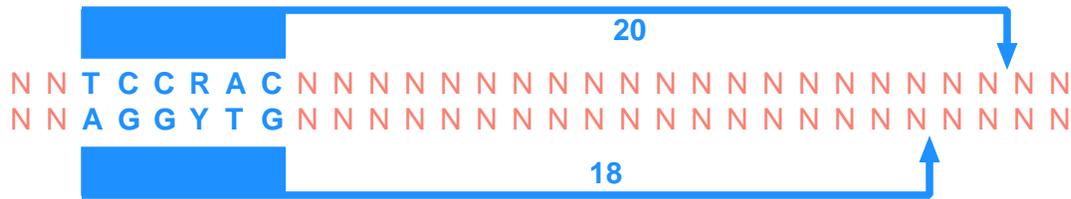


Restriction enzyme Mmel

Type IIs. A wonderful overhang cutter.



Tags of 20 nucleotides allow $4^{20} = 1.2 \times 10^{12}$ possible combinations

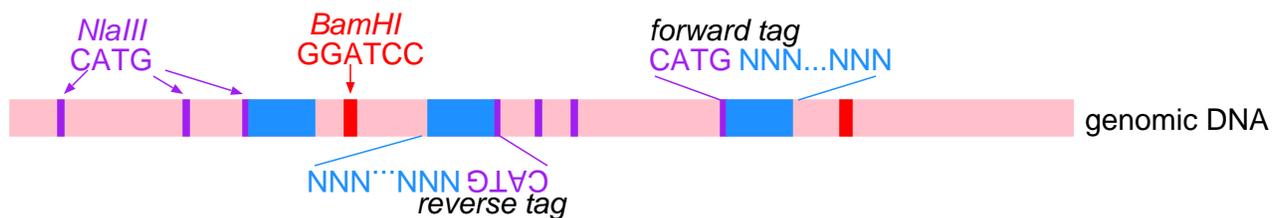
Oligonucleotide cassettes containing the Mmel recognition sequence can be prepended to DNA after cutting with some other enzyme, such as NlaIII, MseI, etc.

By obtaining tags from specific locations relative to other features, even more information is added:

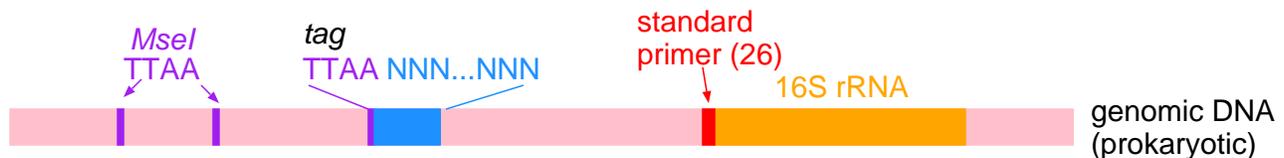
Reference features indicated in red



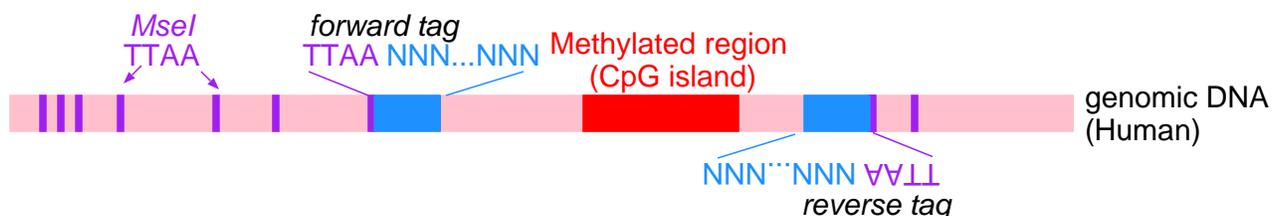
3'-most NlaIII site in mRNA transcript (SAGE; Velculescu, p15, 2001
Proceedings from SAGE 2001: Frontiers in Transcriptome Exploration San Diego, CA)



3'-most NlaIII sites in BamHI fragments of genome (Dunn, et. al Genome Research 12, p1756, 2002)



MseI sites immediately upstream (3') from 16S rRNA standard primer (Trials currently underway)



MseI sites immediately upstream (3') from heavily methylated regions (CpG islands) (Trials currently underway)